

Rethinking Supply Chains:

Supply chain risk assessments - Ignore at your own risk



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COVID-19 will not be the last global disruption we face

There is no playing down the economic fallout that the COVID-19 pandemic has had on businesses worldwide, as well as its impact on supply chains across all industry sectors. The coronavirus threat will eventually fade, just as other global disruptions have come and gone in past years. What is certain, is that there will be other yet unnamed outbreaks and crises that will impact supply chains in the future – it is not so much a matter of 'if' but 'when'. The question is this: what can we do now to brace ourselves for these future events.

Being the lifeline of multiple industries, supply chains need to be in a better position in handling such disruptions. The key to better management in such unforeseen circumstances starts with a better understanding of the risks that we are exposed to.



Supply chain risks have been rising in recent years. Case in point: the occurrence of cyclones, storms, tsunamis and floods has increased drastically over the last 10 years, both in terms of frequency as well as intensity.

According to the Centre for Climate & Energy Solutions, the long-term (1966-2009) average number of tropical storms in the North Atlantic Basin was about 11 annually, with about six becoming hurricanes. More recently (2000-2014), this average number rose to over 15 tropical storms per year, including about seven hurricanes. This increase in frequency is correlated with the rise in North Atlantic sea surface temperatures, which could be partially related to global warming.





The challenges of Supply Chain Risk Assessment

Organizations have been doing risk assessments for years across regulatory compliance, governance, forensic, and recently, sustainability and information technology. There are many reasons and causes that have led to the specific challenges in supply chain risks assessments, as follows:

- Fragmented/Operational View:

On the supply chain front, organizations have been assessing supplier risks, distributor risks and customer revenue risks in silos. Some organizations have also started focusing on their exposure to third party risks. Yet, this is still far short of an integrated supply chain risk assessment.

Historical Data-Based:

With the volume of data available, there is greater complexity in understanding what data is necessary to help organizations better respond to major disruptions. Only some have realized the importance of using data proactively to manage supply chain risks.

Adding to that complexity is the multitude of external data influencing supply chain operations, whether that be weather forecasts that shipments might be delayed or the building up of negative sentiments in the region for a specific product category that might affect sales volumes and lead to inventory pile up. External data sources need to be integrated with internal data sources, and have to be monitored continuously.

- Common Definition and Processes:

It has been observed among multiple organizations that while there are some processes defined around supply chain risks, they are run without a common understanding across various departments. For instance, some organizations consider Sales & Operations Planning or Integrated Business Planning processes as their primary risk management process.

- Risk Categorization:

Organizations are exposed to risks from multiple dimensions. Some of the risks are known and continuously evolving. For instance, some of the major known risks at the moment are the growing tensions around the US-China trade war and other regional trade disputes. Certain risks are unknown at the moment; these include cyclones, typhoons, tsunamis, and political unrests.

Why the need for sound Supply Chain Risk Assessments?

Chief Operating Officers (COOs) and Chief Supply Chain Officers (CSCOs) need to start running periodic risk assessments across the whole supply chain organization. A classification of all identified risks based on their scale of impact and likelihood of occurrence can help COOs and CSCOs develop an ideal response strategy. With a robust supply chain risk assessment done, an organization will have better visibility of risks and will be in a better position to manage and respond to these risks.

All risks can be classified according to four risks buckets. Here are examples of the risks under each bucket, as well as possible ways forward for each:

- High impact and easy to predict: Trade disputes such like US-China tensions, Brexit, etc.
 Possible response strategies: Identify alternative manufacturing locations; Create alternative sourcing & distribution strategies.
- Low impact and easy to predict: Change in consumer preferences, evolving business environment, etc.

 Possible response strategies: Make employees aware and train them on mitigation approaches; Use appropriate systems and technologies to manage these risks.

High impact but difficult to predict

Natural disasters, cyber attacks, sudden negative consumer sentiments, etc.

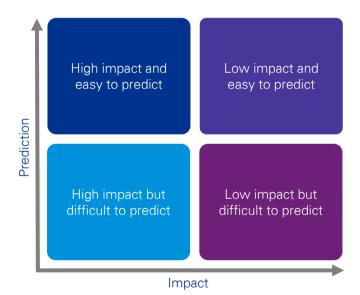
 Possible response strategies: Consider scenario planning based on different revenue strategies. For example, high margin/high revenue/strategic customers. For critical supplies, use various risk mitigation methods.

Low impact but difficult to predict

Suppliers or customers facing financial distress; Regions affected by environmental factors/conflicts

 Possible response strategies: Alternative sourcing/distribution strategies and monitoring customer financial health

The response strategy employed by the business will be driven by the bucket that the risks fall into.



Key risk elements across various supply chain functions

Plan Make **Source Deliver** Single/Multi sourcing Single/multi Impact of environmental, Changes in customer manufacturing plants political events on buying patterns Comprehensive supplier (online/offline) warehouse operations Revenue impact for products that are Exposure to third party Economic/Environmental Revenue impact for produced inhouse warehouse/logistic factors products that are providers externally sourced Inventory strategies for Comprehensive critical materials customer revenue risk

How we can help

Organizations everywhere are asking mission-critical questions pertaining to the supplier and operations risks that have emerged as a result of the COVID-19 environment. We recognize that during this time, business leaders don't only need solutions, but reliable consultants as well.

KPMG's Supply Chain team is here to support you in navigating this unprecedented situation.

KPMG's worldwide network of member firms offer more than 2,000 supply chain, strategy, and value chain management professionals who can help you address the issues of today - from crisis response planning and rapid diagnostics for supply and demand risks across your operation, to scenario analysis and contingency planning.

Our professionals are skilled across all areas of supply chain operations, whether it be strategy and analytics, supply chain risks, planning and execution, or logistics and distribution.

We also have the capabilities to help you integrate tax planning into your business operations to help minimize expenses and risk, enhance return on investment, and drive efficiencies across operations.

About Rethinking Supply Chains

KPMG Rethinking Supply Chains highlights the latest issues in Supply Chain Operations, impending changes to current practices, and potential problem areas that may impact your company.

As certain issues discussed herein are time sensitive, it is advisable to make plans accordingly. Rethinking Supply Chains is issued exclusively for the information of clients and staff of KPMG Services Pte. Ltd. and should not be used or relied upon as a substitute for detailed advice or a basis for formulating business decisions.

To uncover more insights on how you can navigate the future of supply chains, click here. Alternatively, feel free to contact us to discuss supply chain issues and to find out how we can help take your supply chain operations forward.

Contact us



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